

NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER SAN D--ETC F/G 5/9
THE EFFECTS OF UNMET EXPECTATIONS, SATISFACTION, AND COMMITMENT--ETC(U)
AUG 81 A J FARKAS
NPRDC-SR-81-25

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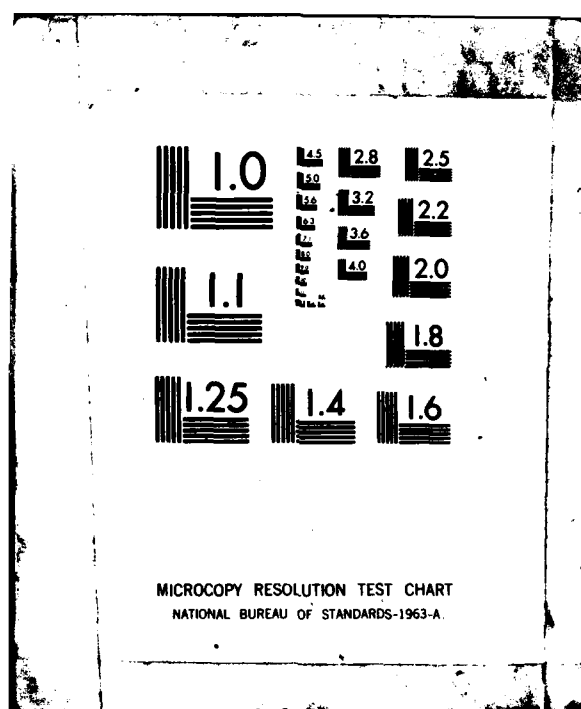
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Figure 1

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AUGUST 1981

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AND COMMITMENT ON THE REENLISTMENT INTENTIONS
OF FIRST-TERM ENLISTED PERSONNEL**



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**NAVY PERSONNEL RESEARCH
AND
DEVELOPMENT CENTER
San Diego, California 92152**

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**THE EFFECTS OF UNMET EXPECTATIONS, SATISFACTION, AND
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FOREWORD

This research and development was conducted in response to Navy Decision Coordinating Paper, NDCP-Z1178-PN (Attrition Analysis and Management), subproject Z1178-PN.02 (Retaining Qualified Enlisted Personnel) and was sponsored by the Deputy Chief of Naval Operations (OP-01). The objective of this subproject is to identify factors related to attrition of first-term enlisted personnel that will aid in retaining those who can best benefit the Navy.

This report is the fourth in a series of reports being prepared under this subproject. The first report of this series (NPRDC TR 79-5 of December 1978) identified factors that are predictive of attrition during recruit training. The second (NPRDC TR 80-18 of April 1980) concerned recruits' attitudinal changes between the beginning and end of recruit training, their perceptions of recruit training, their commitment to the Navy, and their future expectations. The third (NPRDC TR 81-3) compared the attitudes of recruit training graduates, delayed graduates, and attrites. The purpose of the effort described herein was to determine how unmet expectations, changes in satisfaction, and changes in commitment relate to changes in the intention to reenlist.

Appreciation is expressed for the cooperation and assistance provided by the three Recruit Training Commands, particularly to Captain Robert Munson of RTC San Diego, Commander Roger Aydt of RTC Great Lakes, and Commander Barbara Suse of RTC Orlando.

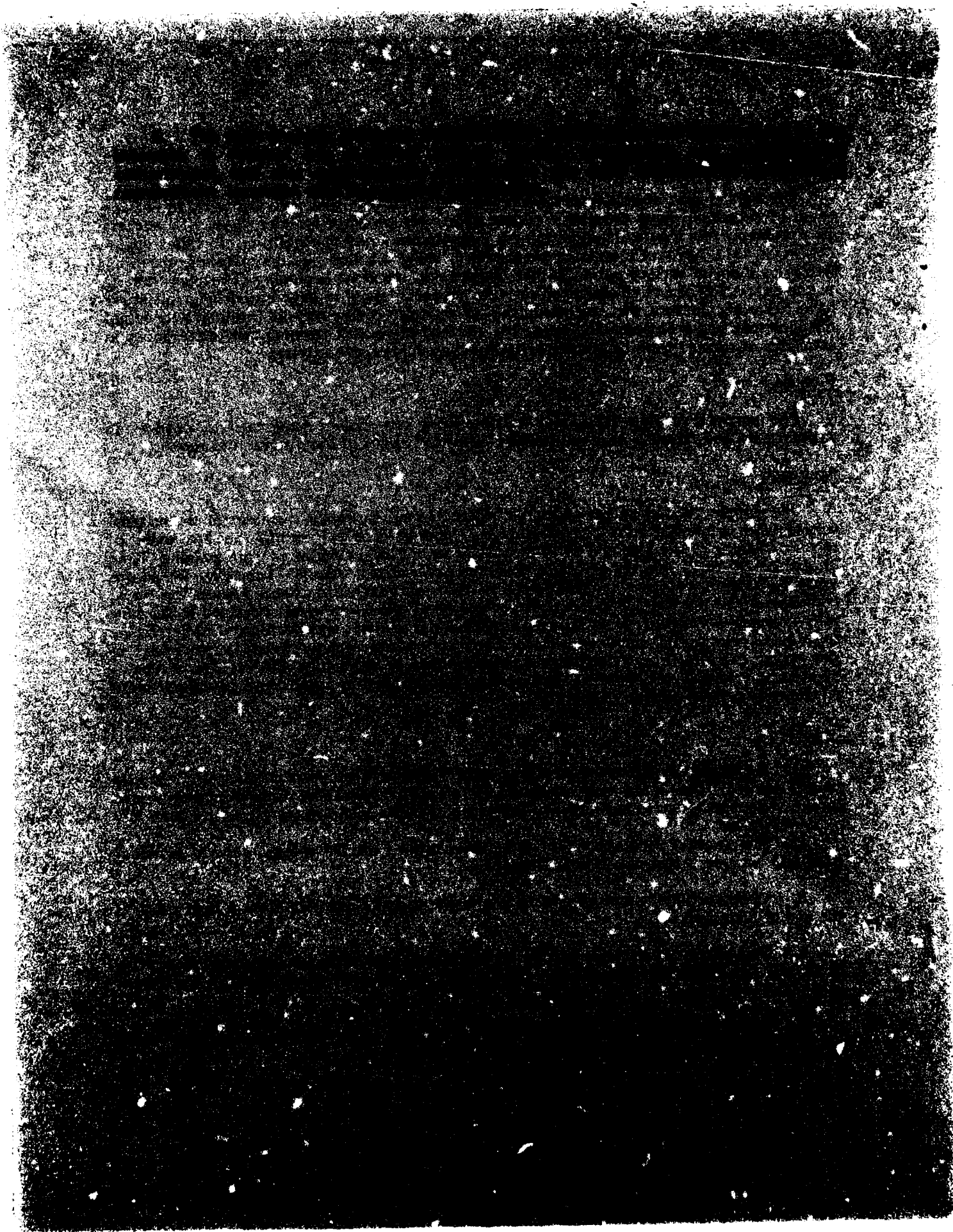
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INTRODUCTION

Problem

Since FY78, retention has been one of the top three issues addressed by the CNO in his annual assessment of the Navy. During the past several years, increasing rates of attrition, coupled with decreasing rates of retention, have created a severe manpower problem for the Navy. This manpower problem has made it more difficult to obtain an adequate number of recruits, increased recruiting and training costs, and decreased fleet readiness.

Background

To address this problem, the Navy Personnel Research and Development Center (NAVPERSRANDCEN) is conducting a longitudinal study of selective retention. In this study, a cohort of 4911 first-term enlisted personnel is being tracked by administering questionnaires to them at various points in their enlistment, from the beginning of recruit training to the expiration of active obligated service (EAOS). This cohort includes 4697 males and 214 females, and both regular and reserve recruits.

To date, three reports have been issued on the longitudinal study. The first report (Landau & Farkas, 1978) provided information obtained from a questionnaire administered to the recruits during the fourth day of recruit training. The second report (Landau, Farkas, & Wagner, 1980) provided information obtained from a questionnaire administered during the 8th week of recruit training. Although 4483 members of the original sample remained on active duty at that time, only 3672 completed the questionnaire. The rest (N = 811) either were not present (e.g., because of illness, duty) on the day the questionnaire was administered or had been "set back" for academic, behavioral, or medical reasons. The third report (Farkas, 1980) described differences among recruits who were discharged during recruit training (attrites), who graduated after a delay due to remedial or medical treatment (delayed graduates), or who graduated without delay (graduates). This effort was based on a sample of 4011 recruits: 3327 graduates, 265 delayed graduates, and 419 attrites. Nine hundred members of the original cohort of 4911 were excluded for various reasons: 132 because demographic and attrition data for them could not be located on the Enlisted Master Record (EMR) file, 29 because they failed to indicate whether they had been delayed during training, and 739 because they did not complete the second questionnaire. Subsequent reports will provide information gained from questionnaires administered at other assessment points. Collectively, the information obtained through this longitudinal study should be useful in determining how changes in important attitudes—occurring from one assessment point to the next—affect attrition and reenlistment.

Several reviews of the literature on employee turnover (e.g., Porter & Steers, 1973) have found a consistent, though modest, relationship between job satisfaction and turnover. Porter and Steers (1973) explained this relationship in terms of met expectations. An employee has certain expectations about the outcomes he will receive from a job. If these expectations are met, he will experience job satisfaction and will tend to remain in the organization. If they are not met, he will experience job dissatisfaction and will tend to withdraw from the organization.

More recent work (Porter, Steers, Mowday, & Boullion, 1974; Porter, Crampon, & Smith, 1976; Royle & Robertson, 1980) suggests that organizational commitment may be a stronger predictor of turnover than is satisfaction. Organizational commitment includes

acceptance of the values and goals of the organization, a willingness to exert high effort on behalf of the organization, and a desire to remain in the organization (Salancik, 1977). Porter et al. (1974) assume that job satisfaction is one of the causes of organizational commitment, while Salancik (1977) suggests just the opposite; that is, that commitment is one of the causes of job satisfaction.

Other recent work (Newman, 1974; Kraut, 1975; Bruni, Jones, & James, 1975; Lau, 1979; Royle & Robertson, 1980) has shown that the intention to remain or withdraw from the organization is a very consistent predictor of behavior. Some theorists (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1977) assert that intentions are the best predictors of behavior and that attitudes influence behavior through intentions.

Purpose

The purpose of this effort was to determine how unmet expectations, changes in satisfaction, and changes in commitment relate to changes in the intention to reenlist. Specifically, it sought to answer three questions:

1. Is there a direct relationship between unmet expectations and the intention to reenlist, or do unmet expectations have only indirect effects on the intention through satisfaction and commitment?
2. Is there a causal relationship between satisfaction and commitment? If so, does satisfaction cause commitment, or does commitment cause satisfaction?
3. Which is the more important determinant of the intention to reenlist: commitment or satisfaction?

METHOD

Subjects

The sample for this effort consisted of the 575 male, regular recruits who responded to the questionnaires administered at three assessment points:

1. Time 1 refers to the questionnaire administered to recruit companies during the 8th week of recruit training. As indicated previously, 4483 recruits remained on active duty at that time, but only 3672 completed the questionnaire.
2. Time 2 refers to the questionnaire administered 8 to 10 months after the beginning of recruit training. It was mailed to 3772 recruits who were still on active duty and for whom addresses could be found on the EMR. Only 1882 recruits responded.
3. Time 3 refers to the questionnaire administered 20 to 21 months after the beginning of recruit training. It was mailed to the same recruits as was the Time 2 questionnaire. Only 1261 recruits responded.

Analyses

1. To determine whether the sample was representative of members of the original sample, demographic data were extracted from the EMR for all male, regular recruits in

the original sample (N = 3923) (988 members were either reservists or female, or both). Data for the 575 male, regular recruits in the sample were then compared with those for the remainder of the male, regular recruits (N = 3348).

2. Responses made by sample members to questionnaire items on general attitudes toward the Navy, commitment to the Navy, and future expectations of the Navy at the three assessment points of interest to this effort were compared to see how they changed over time.

3. A cross-lagged panel analysis (Kenny, 1975) was performed to determine the causal relationship between general satisfaction and organizational commitment to the Navy.

4. A path analysis (Cook & Campbell, 1976) was performed to determine the effects of unmet expectations, changes in general satisfaction, and changes in organizational commitment on changes in the intention to reenlist.

RESULTS

Demographics

Table 1 provides demographic data for present sample members and the rest of the male, regular recruits in the original sample. As shown, present sample members had slightly more years of education, included a higher percentage of Caucasians, and demonstrated higher mental aptitude, as measured by the Armed Forces Qualifications Test (AFQT), than did the rest of the male, regular recruits in the initial sample. There were no differences between the two groups on marital status or age.

Table 1
Demographic Variable Means for the Male, Regular Recruits
in the Current Sample and for those in the Rest
of the Initial Sample

Variable	Actual Sample (N = 575)		Rest of Male, Regular Recruits in Initial Sample ^a		t
	M	SD	M	SD	
Education	11.74	0.96	11.50	0.96	-5.38*
Race (% Caucasian)	0.90	0.29	0.85	0.35	-3.22*
Marital Status (% Married)	0.04	0.20	0.05	0.21	0.20
Mental Aptitude (Armed Forces Qualification Test)	63.88	19.30	57.17	17.81	-8.23*
Age	19.12	2.08	19.03	1.93	-0.91

^aNumber of recruits for whom data were available ranged from 3324 to 3348.

*p < .005

Questionnaire Data

The responses of sample members to the questionnaire items on general attitudes are provided in Table 2. As shown, at Time 1, sample members expressed strong agreement with the statement that they intended to complete their enlistment (item 1). At Time 2, they expressed slightly less agreement with the intention and this held constant from Time 2 to Time 3.

In contrast, the sample expressed progressively more agreement from Time 1 to Time 3 that they were sorry they had joined the Navy (item 2), that they had thought a lot about getting out of the Navy (item 3), and that they would leave the Navy if they had the chance (item 4). They expressed progressively less agreement from Time 1 to Time 3 that they were generally satisfied with the Navy (item 5). Although they were uncertain at Time 1 about their longer-term intentions, with the passage of time, they became more certain that they did not intend to reenlist (item 6) or to make the Navy their career (item 7). The responses of sample members to items on commitment and future expectations are provided in Tables 3 and 4 respectively. As shown, on every item, the mean organizational commitment expressed steadily declined over time, as did mean expectations of receiving various positive work outcomes from the Navy.

Table 2
General Attitudes Toward the Navy Held by Sample (N = 575)
at Three Points During the First Enlistment

Item	Time ^a	Percentages ^b			M ^c	SD	F ^d
		Disagree	Uncertain	Agree			
1. I intend to complete my enlistment.	1	1.2	1.7	97.1	4.55	0.63	14.43*
	2	1.9	7.3	90.8	4.39	0.76	
	3	2.8	5.9	91.3	4.35	0.79	
2. I am sorry that I joined the Navy.	1	84.2	12.5	3.3	1.78	0.84	119.06*
	2	65.9	21.2	12.9	2.29	1.10	
	3	60.5	19.0	20.5	2.55	1.21	
3. I think a lot about getting out of the Navy.	1	82.8	9.0	8.2	1.91	0.94	322.03*
	2	54.1	14.6	31.3	2.74	1.19	
	3	35.8	12.0	52.2	3.28	1.21	
4. I would leave the Navy if I had the chance.	1	73.0	20.7	6.3	2.01	0.97	265.88*
	2	41.6	36.9	21.5	2.78	1.13	
	3	28.9	33.4	37.7	3.23	1.20	
5. So far, I am generally satisfied with the Navy.	1	4.0	17.9	78.1	3.87	0.73	154.82*
	2	15.1	19.5	65.4	3.58	0.98	
	3	34.7	17.0	48.3	3.06	1.16	
6. I do not intend to reenlist after finishing my enlistment	1	22.1	63.3	14.6	2.91	0.87	146.84*
	2	9.2	53.7	37.1	3.46	1.03	
	3	8.2	40.0	51.8	3.76	1.12	
7. I intend to make the Navy my career.	1	17.0	63.8	19.2	3.02	0.92	259.72*
	2	46.6	46.6	6.8	2.38	1.01	
	3	62.5	34.6	2.9	2.02	0.96	

^aTime 1 refers to questionnaire administered during the 8th week of boot camp; Time 2, 8 to 10 months after beginning of boot camp; and Time 3, 20 to 21 months after beginning of boot camp.

^bDisagree percentages reflect "Strongly Disagree" and "Disagree" responses; agree percentages reflect "Strongly Agree" and "Agree" responses.

^cBased on responses made on a 5-point scale, where 1 = "Strongly Disagree" and 5 = "Strongly Agree."

^dThe degrees of freedom for the seven general attitude items were 2, 1148.

*p < .001.

Table 3
Commitment to the Navy felt by Sample (N = 575)
at Three Points During the First Enlistment

Item ^a	Time ^b	Percentages ^c			M ^d	SD	F ^e
		Disagree	Uncertain	Agree			
1. I am willing to work more than is normally expected in order to help the Navy to be successful.	1	2.4	10.1	87.5	4.18	0.73	203.62*
	2	8.2	18.1	73.7	3.82	0.86	
	3	21.4	26.0	52.6	3.30	1.04	
2. I talk up the Navy to my friends as a great organization to work for.	1	12.4	18.2	69.4	3.79	1.00	217.33*
	2	33.2	16.6	50.2	3.21	1.17	
	3	50.8	18.9	30.3	2.67	1.14	
3. I would accept almost any type of job assignment in order to keep working for the Navy.	1	46.8	33.3	19.9	2.57	1.10	97.98*
	2	61.2	27.3	11.5	2.22	1.06	
	3	79.4	16.2	4.4	1.86	0.87	
4. I find that my values and the Navy's values are very similar.	1	17.1	35.7	47.2	3.36	0.96	174.82*
	2	35.3	32.1	32.6	2.92	1.07	
	3	56.8	26.8	16.4	2.41	1.02	
5. I am proud to tell others that I am in the Navy.	1	2.9	5.9	91.2	4.35	0.76	255.59*
	2	9.6	16.4	74.0	3.83	0.92	
	3	25.2	23.0	51.2	3.26	1.14	
6. The Navy really inspires the very best in me in the way of job performance.	1	7.9	26.8	65.3	3.71	0.87	193.35*
	2	30.8	26.8	42.4	3.13	1.06	
	3	47.0	24.6	28.4	2.68	1.09	
7. I am extremely glad I chose the Navy over other organizations I was considering at the time I joined.	1	6.2	15.7	78.1	4.03	0.91	172.31*
	2	14.6	21.4	64.0	3.62	1.04	
	3	33.1	24.9	42.0	3.03	1.19	
8. I really care about what happens to the Navy.	1	3.7	7.2	89.1	4.20	0.81	141.95*
	2	7.9	10.3	82.5	3.95	0.88	
	3	18.5	22.2	59.3	3.42	1.04	
9. For me, this is the best of all possible organizations for which to work.	1	8.1	31.2	60.7	3.77	0.98	287.89*
	2	27.7	42.4	29.9	3.00	1.09	
	3	47.7	33.0	19.3	2.55	1.10	
10. I feel little loyalty to the Navy.	1	72.3	8.6	19.1	3.78	1.17	33.58*
	2	59.0	15.7	25.3	3.45	1.12	
	3	52.3	23.7	24.0	3.30	1.13	
11. I could just as well be working for a different organization as long as the type of work was similar.	1	42.1	33.0	24.9	3.24	1.03	28.14*
	2	34.0	30.0	36.0	2.97	1.05	
	3	28.6	25.5	45.9	2.82	1.09	
12. It would take little change in my present circumstances to cause me to leave the Navy.	1	62.9	22.9	14.2	3.73	1.07	94.77*
	2	51.5	26.2	22.3	3.34	1.04	
	3	34.5	28.6	36.9	2.93	1.09	
13. There's not too much to be gained by making the Navy my career.	1	64.1	28.2	7.7	3.80	0.92	295.61*
	2	35.2	35.9	28.9	3.06	1.07	
	3	20.7	27.7	51.6	2.48	1.16	
14. Deciding to join the Navy was a definite mistake on my part.	1	80.4	13.8	5.8	4.08	0.89	108.10*
	2	64.5	21.3	14.2	3.61	1.02	
	3	54.4	22.7	22.9	3.30	1.20	
15. Often, I find it difficult to agree with the Navy's policies on important matters relating to its personnel.	1	56.6	28.3	15.1	3.54	0.97	252.56*
	2	38.2	28.7	33.1	3.03	1.06	
	3	16.7	16.9	66.4	2.31	1.05	

^aThe scoring on items 10 through 15 has been reversed, so that higher scores indicate more commitment.

^bTime 1 refers to questionnaire administered during the 8th week of boot camp; Time 2, 8 to 10 months after the beginning of boot camp; and Time 3, 20 to 21 months after the beginning of boot camp.

^cDisagree percentages reflect "Strongly Disagree" and "Disagree" responses; agree percentages reflect "Strongly Agree" and "Agree" responses.

^dBased on responses made on a 5-point scale, where 1 = "Strongly Disagree" and 5 = "Strongly Agree."

^eThe df for the commitment items ranged from 2, 1080 to 2, 1098.

*p < .0001.

Table 4
Future Expectations of the Navy Expressed by Sample (N = 575)
at Two Points During the First Enlistment

Item	Time ^a	Percentages ^b			M ^c	SD	F ^d
		Will Not Happen	Uncertain	Will Happen			
1. Interesting job/work duties.	1 3	4.2 27.0	15.7 19.5	80.1 53.5	4.04 3.30	0.80 1.12	204.57**
2. Good working conditions.	1 3	5.5 27.9	19.1 19.5	75.4 52.6	3.93 3.25	0.81 1.13	157.02**
3. Treated with respect by supervisors/leaders	1 3	6.8 18.5	21.6 20.3	71.6 61.2	3.84 3.46	0.85 1.05	51.86**
4. Working as part of a team.	1 3	2.4 10.5	5.9 16.0	91.7 73.5	4.33 3.79	0.72 0.94	132.26**
5. Doing difficult and demanding work.	1 3	5.3 17.2	16.1 14.2	78.6 68.6	4.02 3.68	0.85 1.10	36.46**
6. Taking pride in my work.	1 3	0.9 11.6	4.6 10.6	94.5 77.8	4.54 3.90	0.66 1.07	174.80**
7. Supervisors/leaders who think of me as a person.	1 3	4.6 16.9	16.4 17.3	79.0 65.8	3.97 3.60	0.79 1.09	47.16**
8. Gaining responsibility.	1 3	1.1 6.7	5.4 8.1	93.5 85.2	4.38 4.07	0.65 0.93	42.16**
9. Being treated in a fair manner.	1 3	2.8 14.8	15.1 15.3	82.1 69.9	4.04 3.63	0.73 0.98	61.80**
10. Doing the type of work I want.	1 3	7.7 24.9	19.2 16.1	73.1 59.0	3.91 3.38	0.96 1.22	69.19**
11. Getting credit when I do my work duties well.	1 3	5.7 21.2	19.7 19.9	74.6 58.9	3.91 3.45	0.83 1.04	76.16**
12. Friendly feelings between co-workers.	1 3	1.8 7.4	13.8 13.5	84.4 79.1	4.05 3.87	0.67 0.83	17.66**
13. Supervisors/leaders willing to listen to my problems.	1 3	5.7 13.6	25.0 21.5	69.3 64.9	3.78 3.61	0.81 0.96	13.24*
14. Good leadership/supervision.	1 3	1.7 18.5	13.3 23.8	85.0 57.7	4.09 3.47	0.69 1.01	146.25**
15. Learning skills that will be useful later in my life.	1 3	3.5 22.1	8.5 17.1	88.0 60.8	4.35 3.52	0.80 1.21	211.60**
16. Chance to use my free time for things I like to do.	1 3	5.2 17.3	13.8 15.3	81.0 67.4	4.07 3.66	0.85 1.11	51.88*
17. Regular promotions and advancements.	1 3	2.8 11.4	15.5 16.2	81.7 72.4	4.07 3.82	0.75 1.04	25.20**
18. Chance to fully use my abilities.	1 3	5.1 29.0	14.5 16.3	80.4 54.7	4.05 3.28	0.86 1.15	194.64**
19. Freedom to set my own work goals.	1 3	9.4 31.6	32.2 24.2	58.4 44.2	3.68 3.13	0.94 1.11	103.33**
20. Able to set my own pace in getting my work done.	1 3	19.6 36.5	38.5 23.3	41.9 40.2	3.31 3.02	0.98 1.14	22.75**

^aTime 1 refers to questionnaire administered during the 8th week of boot camp; and Time 3, 20 to 21 months after beginning of boot camp. Items on expectations were not included in questionnaire administered 8 to 10 months after beginning of boot camp (Time 2).

^bWill Not Happen percentages reflect "Definitely Will Not Happen" and "Probably Will Not Happen"; Will Happen percentages reflect "Definitely Will Happen" and "Probably Will Happen."

^cBased on responses made on a 5-point scale, where 1 = "Definitely Will Not Happen" and 5 = "Definitely Will Happen."

^dThe df for the future expectations ranged from 1,536 to 1,548.

*p < .0005

**p < .0001

Cross-lagged Panel Analysis

To assess the causal relationship between satisfaction and commitment, a two-variable (satisfaction and commitment), three-wave (Times 1, 2, and 3) cross-lagged panel was constructed. This panel is depicted in Figure 1.

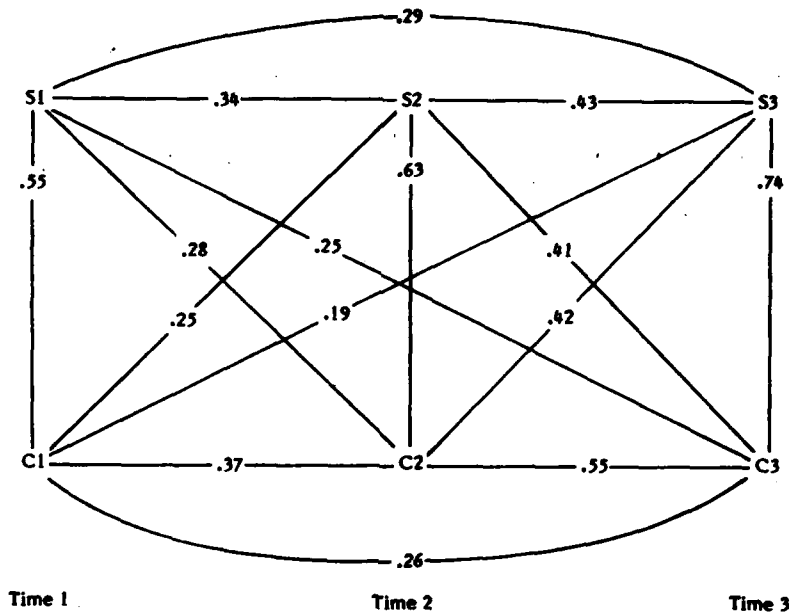


Figure 1. Cross-lagged panel correlations for general satisfaction (S) and Organizational commitment (C) (Based on responses of 492 sample members).

As shown in Figure 1, this panel consists of 15 correlations: 3 synchronous (vertical), 6 autocorrelations (horizontal), and 6 cross-lagged correlations. The 3 synchronous (i.e., same time) correlations assess the relationship between satisfaction and commitment at each of the three time periods. Three of the autocorrelations (i.e., self-correlations) assess the relationships between satisfaction measured at three different times (i.e., between Times 1 and 2, Times 1 and 3, and Times 2 and 3), and the remaining three, the relationships between the three measures of commitment. As shown in Figure 1, the synchronous correlations between satisfaction and commitment rose from a low of .55 at Time 1 to a high of .74 at Time 3. Similarly, the autocorrelations for satisfaction increased from .34 to .43, while those for commitment increased from .37 to .55. This pattern indicates that the relationship between commitment and satisfaction becomes more consistent with the passage of time.

The three pairs of cross-correlations, which assess the relationships between satisfaction and commitment measured at different times, permit inferences to be drawn about the causal relationship between satisfaction and commitment (Cook & Campbell, 1976). As shown in Figure 1, the three pairs of cross-lagged correlations were .28 versus .25 (i.e., satisfaction at Time 1 with commitment at Time 2 vs. commitment at Time 1 with

satisfaction at Time 2), .25 versus .19 (i.e., satisfaction at Time 1 with commitment at Time 3 vs. commitment at Time 1 with satisfaction at Time 3), and .41 versus .42 (i.e., satisfaction at Time 2 with commitment at Time 3 vs. commitment at Time 2 with satisfaction at Time 3). A significant difference between the correlations in any of the three pairs would suggest a causal relationship between satisfaction and commitment. Therefore, since the differences between each pair of correlations were not significant (Kenny, 1975), it appears that no causal relationship exists. Instead, both satisfaction and commitment appear to be caused by some common third variable.

Path Analysis

To assess the plausibility of certain causal relationships between unmet expectations, satisfaction, commitment, and the intention to enlist, a path analysis was performed. In this analysis, respondents' degree of unmet expectations was measured by the mean of the differences in responses to the 20 items on future expectations expressed at Times 1 and 3 (see Table 4); their change in commitment, by the mean of the differences in responses to the 15 items on commitment expressed at Times 1 and 3 (see Table 3); and their change in satisfaction and intention to reenlist, by the differences in responses to the satisfaction and intention items expressed at Times 1 and 3 (see Table 2). Regression analyses were then performed to determine the magnitude of the path coefficients.

The results of this analysis, which are presented in Figure 2, show that the unmet expectations have a moderate amount of influence on the changes over time in general satisfaction (.45) and in organizational commitment (.56). A decrease in future expectations leads to decreases in satisfaction and commitment. The measure of unmet expectations, however, has no direct effect on the intention to reenlist (.01). All of the influence of unmet expectations on this intention is mediated through satisfaction and commitment.

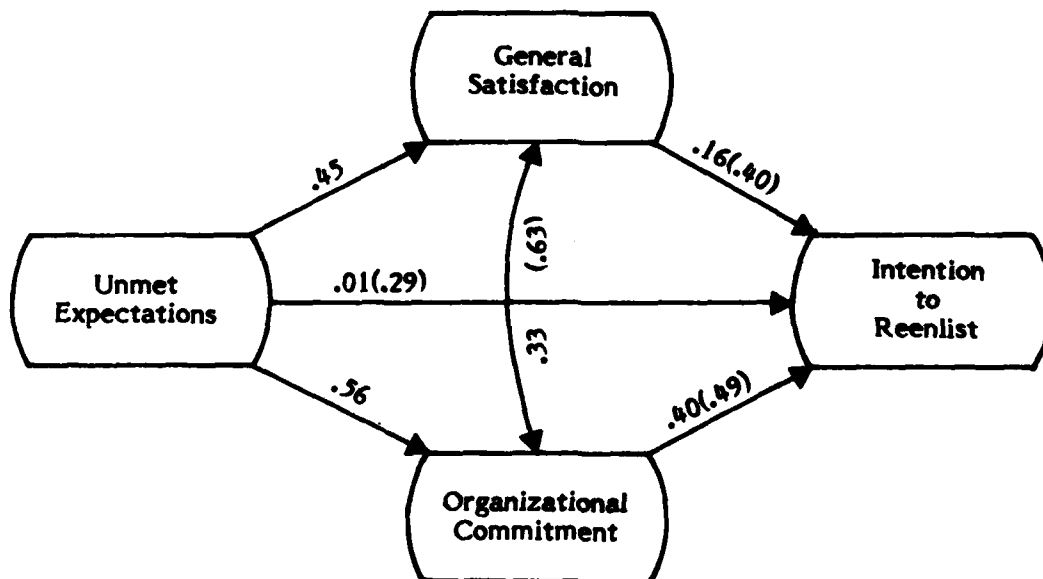


Figure 2. Path analysis relating unmet expectations, general satisfaction, and organizational commitment to reenlistment intentions (N = 471). Note: Where differences existed between the beta weights and the zero order correlations, the latter were included in parentheses.

When the influence of satisfaction and the influence of commitment on the reenlistment intention are compared, commitment (.40) has much greater influence on the intention than does satisfaction (.16). Variation in commitment accounts for 16.0 percent of the variation in the intention, while variation in satisfaction only accounts for 2.6 percent.

Even after removing the common variance due to unmet expectations, the correlation between satisfaction and commitment is still substantial (.33). This indicates that there is additional common variance between these two variables that is not accounted for by unmet expectations.

DISCUSSION AND CONCLUSIONS

The end of boot camp appears to mark the attitudinal high point of a first enlistment. For example, Mobley¹ found the attitudes of Marine Corps recruits were more positive toward the Corps at the end of boot camp than at either the beginning of boot camp or during subsequent assignment. This pattern is partly due to the cognitive dissonance aroused by the severity of recruit training (Aronson & Mills, 1959; Gerard & Matthewson, 1966). In an attempt to justify the severity of their training, the recruits develop more positive attitudes toward the organization. This pattern may also be due to the successful completion of a major life event. Graduation from boot camp is obviously a significant achievement for the recruits that engenders positive feelings toward the organization. This increase in positive attitudes, however, tends to dissipate with continued membership in the organization.

Under ideal conditions, the attitudes of recruits toward the Navy should be very positive at the end of boot camp, decline slightly after graduation from boot camp, and then remain essentially constant for the remainder of the enlistment. Through the first half of the enlistment, only the intention to complete enlistment approximated this ideal pattern. Taken at face value, this result suggests that these recruits have a strong intention to remain in the Navy until the end of their enlistment. The intention to complete the enlistment may be weaker than it appears, however, since these recruits also expressed increasing agreement that they regretted having joined the Navy, thought a lot about getting out of the Navy, and would leave the Navy if possible. These contradictory findings suggest that, while these recruits intend to honor their enlistment contracts, many of them would probably leave the Navy immediately if offered an early discharge (Lau, 1979). These findings demonstrate the need for a multivariate approach to the study of turnover. The relationship between a range of attitudes and intentions must be assessed before the strength of the intention to remain within an organization can be accurately appraised.

Although neither the intention to complete the enlistment nor the intention to reenlist is an exact analogue of the intention to remain in a civilian organization, the latter is a better analogue than the former. Civilian employees are usually free to leave an organization whenever they wish, as long as they give a reasonable amount of notice. Members of the military, however, are not free to prematurely terminate their enlistments. Except for certain legitimate reasons, such as medical disability, the only way a

¹Personal communication with W. H. Mobley (Center for Management and Organizational Research, University of South Carolina) at the ONR conference, San Diego, January 1980.

service member can facilitate such termination after graduation from boot camp is to become an administrative burden. Service members become administrative burdens when they show continued substandard performance and/or when they become disciplinary problems. Thus, service members who are willing to pay the price, generally with a less than honorable discharge, can usually facilitate their premature discharge by becoming administrative burdens. At the end of their enlistment, service members are free to leave the military if they so desire. All enlisted service members who wish to remain in the Navy and who are otherwise eligible must explicitly choose to reenlist. Otherwise, they are automatically discharged.

Cost is the main difference between the intention to complete the enlistment and the intention to remain in a civilian organization: It usually costs the service member more to leave the military prematurely than it costs the civilian to leave his organization. The main difference between the intention to reenlist and the intention to remain in a civilian organization lies in their explicitness: At a definite point in time, the service member must explicitly decide to leave or to remain in the service, while the civilian is not required to make such a decision at any fixed point in time. Since the intention to reenlist is a better analogue of the intention to remain in a civilian organization than the intention to complete enlistment, the causal analysis was restricted to the intention to reenlist. The path analysis related unmet expectations and changes in general satisfaction and in organizational commitment with changes in the intention to reenlist. It was assumed that unmet expectations should cause changes in both general satisfaction (Porter & Steers, 1973) and in organizational commitment. As expected, unmet expectations correlated moderately, and about equally, with changes in both satisfaction and commitment.

A cross-lagged panel analysis was then used to determine the causal relationship between satisfaction and commitment. Contrary to expectations (Porter et al., 1974; Selancik, 1977), no causal relationship was discovered between satisfaction and commitment. Instead, changes in satisfaction and commitment appear to be due to changes in a common third variable. It was assumed that the common third variable in this case was unmet expectations. This assumption seemed reasonable, since variation in unmet expectations accounted for most of the common variance shown by satisfaction and commitment. When the variance due to unmet expectations was removed, the shared variance between satisfaction and commitment was reduced from nearly 40 percent to slightly less than 11 percent. Thus, unmet expectations accounted for more than 70 percent of the common variance shared by satisfaction and commitment.

Once the causal relationship between satisfaction and commitment was determined, a path analysis was used to assess the effects of (1) unmet expectations, and (2) changes in satisfaction and commitment on changes in the reenlistment intention. This analysis showed that, when the effects of satisfaction and commitment were taken into account, the modest correlation (.29) between unmet expectations and the reenlistment intention was essentially eliminated (.01). This finding indicates that, while unmet expectations had an effect on the reenlistment intention, it was completely mediated through changes in satisfaction and commitment. The analysis also showed, as expected, that changes in commitment were a stronger determinant of changes in the reenlistment intention than were changes in satisfaction (Porter et al., 1974).

It should be noted, however, that the relative contributions of commitment and satisfaction to changes in the reenlistment intention are strongly affected by the causal

relationship assumed between satisfaction and commitment. Analyses (not reported in the results section) showed that commitment only accounted for more variance than did satisfaction in changes in the reenlistment intention, if it is assumed that commitment causes satisfaction or that no causal relationship exists between commitment and satisfaction. If it is assumed, however, that satisfaction causes commitment, as did Porter et al. (1974), then satisfaction and commitment contributed equally to changes in the reenlistment intention.

In conclusion, these results supported two of the three hypotheses advanced by Porter and associates (1973, 1974, 1976): (1) unmet expectations determine both satisfaction and commitment, and (2) commitment is more important than satisfaction in determining reenlistment intentions. The third hypothesis, that satisfaction causes commitment, was not supported. In fact, if it had been, the second hypothesis would not have been supported.

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